PROFESSIONAL SERVICES AGREEMENT

AGREEMENT

made as of the	8th	day of	June	, 2005.

Between the Owner: Miami Beach, Florida, a political subdivision of the State

of Florida, acting by and through its Mayor and City Commission, hereinafter called the "City" or "Owner", which shall include its officials, successors, legal

representatives, and assigns.

and the Consultant: Camp Dresser & McKee, Inc., a Massachusetts corporation

authorized to do business in Florida with offices at:

800 Brickell Avenue

Suite 710

Miami, Florida 33131

Which term shall include its officers, partners, employees, successors, legal representatives, and assigns.

For the Project:

Phase I Work Order Management Implementation of a City of Miami Beach Infra-Structure Management System

(IMS)

The Owner and Consultant agree as set forth herein:

PROFESSIONAL SERVICES AGREEMENT

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WITNESSETH

ARTICLE 1

DEFINITIONS

- **1.1 AGREEMENT:** The written Agreement between the Owner and the Consultant including the exhibits attached hereto and any and all Amendments authorized and executed for the parties hereto.
- AMENDMENT: A written modification to this Agreement executed by the Consultant and the Owner covering changes, additions, or reductions in the terms of this Agreement. Amendments shall be approved by the City Commission, if they exceed twenty-five thousand dollars (\$25,000.00) or the City Manager if they are twenty-five thousand dollars (\$25,000.00) or less in amount (or other such amount as may be specified by the City of Miami Beach Procurement Ordinance, as amended). Even for Amendments for less than twenty-five thousand (\$25,000.00), the City Manager shall retain the right to seek and obtain concurrence of the City Commission for the approval of any such Amendment.
- 1.3 CITY: The "City" shall mean the City of Miami Beach, a Florida municipal corporation having its principal offices at 1700 Convention Center Drive, Miami Beach, Florida, 33139. For purposes of this Agreement, the "City" may also be referred to as "Owner," as defined in subsection 1.9.
- 1.4 CITY COMMISSION: "City Commission" shall mean the governing and legislative body of the City.
- 1.5 CITY MANAGER: The "City Manager" shall mean the chief administrative officer of the City. The City Manager shall be construed to include any duly authorized designees, including the Project Manager and/or the Director, and shall serve as the City's representative to whom administrative requests for approvals shall be made and who shall issue authorizations (exclusive of those authorizations reserved to the City Commission) to the Consultant.
- 1.6 CONSULTANT: The named entity on page 1 of this Agreement. When the term "Consultant" is used in this Agreement it shall be deemed to include any Subconsultants and any other person or entity acting under the direction or control of Consultant. Any Sub-consultants retained by Consultant pursuant to this Agreement and the Project shall be subject to prior written approval of the Owner.
- 1.7 **DEPARTMENT:** Department of Public Works, a department of the City of Miami Beach.
- 1.8 DIRECTOR: The Director of the Department of Public Works. The Director, in addition to the Project Manager (as defined in subsection 1.10), shall serve as the

- City's representative to whom administrative requests for approvals shall be made, as provided herein.
- 1.9 OWNER: The City of Miami Beach, Florida.
- 1.10 PROJECT MANAGER: An individual designated by the City Manager to represent the Owner during the Consultant's performance of the Services, and who shall be the City's authorized representative to coordinate, direct, and review on behalf of the City all matters related to the Project, except as otherwise provided herein. The Project Manager may also serve as the City's representative to whom administrative requests for approvals shall be made, as provided herein.
- 1.11 PROPOSAL DOCUMENTS: "Proposal Documents" shall mean the REQUEST FOR PROPOSALS NO. 64-02/03 FOR INFRASTRUCTURE MANAGEMENT SYSTEM (IMS) FOR THE CITY OF MIAMI BEACH issued by the City in contemplation of this Agreement, together with all amendments thereto, if any, and the Consultant's proposal in response thereto (Proposal), which is incorporated by reference in this Agreement and made a part hereof; provided, however, that in the event of an express conflict between the Proposal Documents and this Agreement, this Agreement shall prevail.
- 1.12 REIMBURSABLE EXPENSES: Those expenses delineated in Article 5, Reimbursable Expenses, of this Agreement which are separately approved by the Owner that are incurred by the Consultant in the fulfillment of this Agreement and which are to be compensated to the Consultant in addition to the Fixed Lump Sum.
- 1.13 RISK MANAGER: The Risk Manager of the City, with offices at 1700 Convention Center Drive, Third Floor, Miami Beach, Florida 33139, telephone number (305) 673-7000, Ext. 6435, and fax number (305) 673-7023.
- 1.14 SERVICES: All services, work and actions by the Consultant performed pursuant to or undertaken under this Agreement.
- 1.15 SUB-CONSULTANT: An independent firm, company, joint venture, corporation or individual under contract with and compensated by the Consultant to perform a portion of the Services required hereunder.
- 1.16 NOTICE TO PROCEED: Written notice to Consultant authorizing the commencement of the Services identified in the notice or as described herein.

ARTICLE 2

INFORMATION TO BE FURNISHED BY THE OWNER

- 2.1 INFORMATION TO BE FURNISHED BY THE OWNER: The Owner will furnish, or otherwise make available to, the Consultant with all documents and records the Owner has available pertaining to the performance of the Agreement, including, but not limited to, all Project files in custody of the Department.
- OBLIGATION OF THE CONSULTANT: The Consultant understands that it 2.2 is obligated to verify to the extent it deems necessary all information furnished or made available by the Owner and that it is solely responsible for the accuracy and applicability of all such information used by said Consultant. It shall be fully understood that Owner, in furnishing and/or making such documents and records available to the Consultant is in no way certifying representing and/or warranting as to the accuracy or completeness of such data, including, but not limited to, any information provided in the City's Request for Qualifications and backup documentation thereto. Any conclusions or assumptions drawn through examination thereof shall be the sole responsibility of the Consultant and subject to whatever measure it deems necessary to final verification essential to its performance under this Agreement. Additional Services required due to inaccurate, incomplete or incorrect information supplied by the City may be undertaken by the Consultant as an Additional Service to this Agreement. Consultant shall notify the Project Manager, in writing, in a timely manner and obtain said Project Manager's written consent, before proceeding with the work. If Consultant proceeds with the Additional Services without notifying and obtaining the consent of the Project Manager, said work shall be deemed to be within the original level of effort and deemed included within the services set forth herein.

ARTICLE 3

GENERAL PROVISIONS

indemnify and save the City, its officers, employees, agents and authorized representatives, harmless from any and all claims, liability, losses, damages, and causes of action which may arise out of the performance of this Agreement by the Consultant to the extent caused by the negligence, recklessness, or intentionally wrongful conduct of the Consultant and other persons employed or utilized by Consultant in the performance of the Agreement; except to the extent such act is caused by the City's negligence. The Consultant shall pay all claims and losses of any nature whatsoever in connection therewith and shall investigate and defend all claims, suits, and actions of any kind of nature in the name of the City, its employees, agents and authorized representatives where applicable, including appellate proceedings, and shall pay all costs, judgments and attorneys fees which

may be issued thereon. Nothing contained in this provision shall be construed so as to require the Consultant to indemnify the City's employees, agents and authorized representatives for their own negligence. This Article 3.1 shall survive the termination and expiration of this Agreement.

- Services under this Agreement until the insurance required hereunder has been obtained and such insurance has been accepted by the Owner. The Consultant shall maintain required insurance coverage(s) for the full term of this Agreement or for such longer period(s) as may be specifically required herein. All insurance policies shall be issued by companies authorized to do business under the laws of the State of Florida and rated no less than "B+" as to management and no less than Class "VI" as to strength, in accordance with the A.M. Best Company Insurance Guide, or its equivalent as approved by the City's Risk Manager.
 - 3.2.1 Certificate of Insurance: The Consultant shall furnish certificates of all required insurance to the Owner for approval as may be required by the City's Risk Manager. The certificates shall clearly indicate that that Consultant has obtained insurance of the types, amounts and classifications required by these provisions. No material change or cancellation of the insurance shall be effective without a thirty (30) day prior written notice to, and approval by, the City's Risk Manager.
 - 3.2.2 Automobile Liability Insurance: The Consultant shall maintain Automobile Liability Insurance covering all owned, non-owned and hired vehicles used in connection with the Services in amounts not less than \$1,000,000 combined single limit per occurrence for bodily injury and property damage liability.
 - 3.2.3 Comprehensive General Liability Insurance: The Consultant shall maintain Public Liability Insurance on a comprehensive basis in an amount not less than \$1,000,000 combined single limit per occurrence for bodily injury and property damage, which will include products, completed operations, and contractual liability coverage. The City of Miami Beach, Florida must be named as an additional insured with respect to this coverage.
 - 3.2.4 Professional Liability: The Consultant shall maintain Errors and Omissions Liability Insurance in an amount not less than one million (\$1,000,000) per claim with a deductible not to exceed 10% (ten percent) of the limit of liability. Consultant shall notify Owner in writing within thirty (30) days of any claims filed or made against the Professional Liability Insurance Policy.

- 3.2.5 Worker's Compensation: The Consultant shall maintain Worker's Compensation Insurance and employer's liability coverage in compliance with Florida Statutes Chapter 440.
- 3.2.6 Right to Examine: The Owner reserves the right, upon reasonable notice, to examine the original or true copies of all policies of insurance (including but not limited to binders, amendments, exclusions, riders and applications) to determine the true extent of coverage. The Consultant agrees to permit such inspection at the offices of the Consultant.
- 3.2.7 Compliance: The compliance with the requirements of this Article shall not relieve the Consultant of its liability under any other portion of this Agreement of any other agreement between the Owner and the Consultant.
- 3.3 NON-EXCLUSIVITY: Notwithstanding any provisions of this Agreement, the City is not precluded from retaining of utilizing any other architect, engineer, design professional or other consultant to perform any other professional services within the contract limits defined in the Agreement. The Consultant shall have no claim against the City as a result of the City electing to retain or utilize such other architect, engineer, design professional or other consultant to perform any such incidental services.
- ASSIGNMENT: The Consultant shall not assign, transfer or convey this Agreement to any other person, firm association or corporation, in whole or in part without the prior written consent of the Owner. However, the Consultant will be permitted to cause portions of the Services to be performed by sub-consultants, as authorized elsewhere herein.
- 3.5 PROVISON OF ITEMS NECESSARY TO COMPLETE SERVICES: In the performance of the Services prescribed herein, it shall be the responsibility of the Consultant to provide all salaries, wages, materials, equipment, sub-consultants and other purchased services, etc., as necessary to complete said Services.
- 3.6 SUB-CONSULTANTS: Any Sub-consultants retained by Consultant pursuant to the Agreement and the Project shall be subject to the prior written approval of the Owner. Such Sub-consultant services, if approved, shall be pursuant to appropriate agreements between the Consultant and the Sub-consultants which shall contain provisions that preserve and protect the rights of the Owner under this Agreement. Nothing contained in this Agreement shall create any contractual relationship between the Owner and Sub-consultants.

The Consultant shall not change any Sub-consultant without prior written approval by the Owner in response to a written request from the Consultant stating the reasons for any proposed substitution. Any approval of a Sub-consultant by the Owner shall not in any way shift the responsibility for the quality and acceptability by the Owner of the services performed by the Sub-

consultant from the Consultant to the Owner. Payment of Sub-consultants employed by the Consultant shall be the responsibility of the Consultant and shall not be cause for any increase in compensation to the Consultant for the performance of the Services. The quality of services and acceptability to the Owner of the services performed by such Sub-consultants shall be the sole responsibility of the Consultant.

3.7 TERM OF AGREEMENT: The term of this Agreement shall begin upon execution by the parties and shall extend for the period of six (6) months following the execution of this Agreement or until the Services have been accepted, whichever may be later.

Nothing in this Article shall prevent the Owner from exercising its rights to terminate the Agreement as provided elsewhere herein.

3.7.1 TIME FOR PERFORMANCE: The Services to be performed by the Consultant shall commence by written instructions in the form of a Standing Order issued by the City's Procurement Director and a Notice to Proceed issued by the Director.

Time is of the essence throughout this Agreement. The Services shall be completed within one hundred and fifty (150) calendar days from the issuance of the Notice to Proceed.

The time for completion of any Services may be extended by the City Manager in the event adverse weather conditions or acts of God render performance by the Consultant impossible. Such extensions of time shall not be cause for any claim by the Consultant for extra compensation. Any condition of Act of God preventing performance for more than six (6) months shall give either party the right to terminate the Agreement with respect to the remaining Services to be performed.

- 3.8 TERMINATION OF AGREEMENT: This Agreement may be terminated upon prior written notice by either party as described herein. The Owner may terminate this Agreement for cause or for convenience. The Consultant may terminate this Agreement for cause in the event that the Owner willfully violates any provisions of the Agreement and does not cure the violation within the reasonable time period stipulated in this Agreement. The Consultant shall have no right to terminate this Agreement for convenience of the Consultant, without cause.
 - 3.8.1 Owner's Termination for Cause: The Owner may terminate this Agreement or any Work Order upon seven (7) days written notice for cause in the event that the Consultant violates any provisions of this Agreement, or performs same in bad faith, or unreasonably delays the performance of the Services. Such written notice to the Consultant shall

spell out the cause and provide a fifteen (15) day cure period in the notification to remedy the cause.

In the event the Owner terminates this Agreement for cause, the Owner will take over any and all documents resulting from Services rendered up to the termination and may complete them, by contracting with other consultant(s) or otherwise, and in such event, the Consultant shall be liable to the Owner for any additional cost incurred by the Owner due to such termination. "Additional Cost" is defined as the difference between the actual cost of completion of such incomplete Services and the cost of completion of such Services which would have resulted from payments to the Consultant hereunder had the Agreement not been terminated. Upon receipt of written Notice of Termination, the Consultant shall, promptly assemble and submit as provided herein, all documents including drawings, calculations, specifications, reports, correspondence, and all other relevant materials affected by such termination. No payments shall be made: 1) for Services not satisfactorily performed; and 2) for the cost of assembly and submittal of documents for Services performed satisfactorily or unsatisfactorily.

- 3.8.2 Owner's Termination for Convenience: The Owner, in addition to the rights and options to terminate for cause, or any other provisions set forth in this Agreement, retains the right to terminate this Agreement upon thirty (30) days written notice at its sole option at any time for convenience, without cause, when in its sole discretion it deems such termination is in the best interest of the Owner.
- 3.8.3 Consultant's Termination for Cause: The Consultant may terminate this Agreement upon thirty (30) days written notice for cause in the event that the Owner violates any provisions of this Agreement. Such written notice to the Owner shall spell out the cause and provide fifteen (15) days to cure in the notification to remedy the cause. In the event the Consultant exercises its right to terminate this Agreement for cause and the Owner does not cure within the reasonable time period allocated, payment for Services satisfactorily performed prior to the date of termination shall be made in accordance with the article "Compensation for Services."
- 3.8.4 Implementation of Termination: In the event of termination by the Owner, either for cause or for convenience, the Consultant, upon receipt of the Notice of Termination, shall:
 - 1. Stop the performance of Services under this Agreement on the date and to the extent specified in the Notice of Termination;

- 2. Place no further orders of subcontracts except as may be necessary for completion of any portion(s) of the Services not terminated, and as authorized in writing by the Project Manager;
- 3. Terminate all orders and subcontracts to the extent that they relate to the performance of the Services terminated by the Notice of Termination;
- 4. Transfer title to the Owner (to the extent that title had not already been transferred), and deliver in the manner and the times, and to the extent directed by the Owner, all property purchased under this Agreement and reimbursed by the Owner, and not required for completion of the Services not terminated;
- 5. Promptly assemble and submit as provided herein all documents for the Services performed, including plans, calculations, specifications, reports, and correspondence, and all other relevant materials affected by the termination; and
- 6. Complete performance of any Services not terminated by the Notice of Termination.
- 3.8.5 Compensation for Terminated Work: Compensation for terminated work will be made based on the applicable provisions of the article "Compensation for Services."

3.9 INTENT OF AGREEMENT:

- 3.9.1 The intent of the Agreement is for the Consultant to provide professional services for Phase I Work Order Management Implementation of a City of Miami Beach Infra-Structure Management System (IMS), and to include all necessary items for the proper completion of such service.
- 3.9.2 This Agreement is for the benefit of the parties only and if does not grant rights to a third party beneficiary, to any person of does it authorize anyone not a party to the Agreement to maintain a suit for personal injuries, professional liability or property damage pursuant to the terms of provisions of the Agreement.
- 3.9.3 No acceptance order, payment, or certificate of or by the Owner, or its employees or agents shall either stop the Owner from asserting any rights

or operate as a waiver of any provisions hereof or of any power of right herein reserved to the Owner or of any rights to damages herein provided.

- 3.10 SOLICITATION: The Consultant warrants that: 1) it has not employed or retained any company or person, other than a bona fide employee working solely for the Consultant, to solicit or secure this Agreement; and 2) that it has not paid, nor agreed to pay any person, company, corporation, joint venture, individual, or firm, other than a bona fide employee working solely for the Consultant any fee, commission, percentage, gift, or other consideration contingent upon or resulting from the award of making of this Agreement. For breach or violation of this warranty, the Owner has the right to annul this Agreement without any liability to the Owner for any reason whatsoever.
- 3.11 CONSULTANT'S ACCOUNTING RECORDS: Consultant shall keep such records and accounts and require any and all Sub-consultants to keep such records and accounts as may be necessary in order to record complete and correct entries as to personnel hours charged to the Project, and any expenses for which Consultant expects to be reimbursed. All books and records relative to the Project will be available at all reasonable times for examination and audit by City and shall be kept for a period of three (3) years after the completion of all work to be performed pursuant to this Agreement. Incomplete or incorrect entries in such books and records will be grounds for City's disallowance of any fees or expenses based upon such entries. All books and records which are considered public records shall, pursuant to Chapter 119, Florida Statutes, be kept by Consultant in accordance with such statutes.
- 3.12 CITY'S RIGHT TO AUDIT: The City shall have the right but not the obligation to itself conduct, or to retain the services of an independent private sector firm which may be engaged to audit, investigate, monitor, oversee, inspect of review the operations, activities and performance of the Consultant and City in connection with this Agreement. The scope of services performed by the City or such independent firm may include, but are not limited to: monitoring and investigating compliance with Agreement requirements; Project costs; and investigating and preventing corruption and fraud.

Upon ten (10) calendar days written notice to the Consultant from the City, or such independent firm, the Consultant shall make all requested records and documents available for inspection and copying. The City, or such independent firm shall have the right to examine all documents and records in the Consultant's possession, custody or control which, in the City's sole judgment, pertain to performance of the Agreement, including, but not limited to: original estimate files; change order estimate files; worksheets; proposals and agreements from and with successful and unsuccessful sub-consultants and suppliers; Project-related correspondence, memoranda, instructions, financial documents, construction documents, bid documents; back-charge documents; documents and records which involve cash, trade or volume discounts, insurance proceeds, rebates, or

dividends received; payroll and personnel records; and supporting documentation for the aforesaid documents and records.

The provisions in this section shall apply to the Consultant, its officers, agents and employees. The Consultant shall incorporate the provisions in this section in all Subcontracts and all other agreements executed by the Consultant in connection with the performance of the Services.

Nothing in this Agreement shall impair any independent right of the City to conduct audit or investigative activities. The provisions of this section are neither intended nor construed to impose any liability on the City by the Consultant or third parties.

3.13 OWNERSHIP OF DOCUMENTS AND COPYRIGHTS: All notes. correspondence, documents, original drawings, aerial photography, maps, negatives, electronic data, and/or other data developed by the Consultant pursuant to this Agreement shall become the property of the Owner without restrictions or limitations upon their use by the Owner and shall be made available by the Consultant at any time upon request by the Owner, and delivered to the City within thirty (30) days of completion of the Services, termination of this Agreement, or termination or abandonment of the Project. Re-use of such data by the Owner for any purpose other than use on a specific project for which it was prepared, shall be at the Owner's sole risk. Consultant shall not re-use or make available the aforestated data (whether completed or partially completed) to any third parties without the prior written consent of the City Manager. completion of the Services requested pursuant to this Agreement, all of the above data shall be delivered to the Owner as a condition of the Consultant's receipt of payment.

Notwithstanding any provision to the contrary in this Agreement, Consultant shall retain sole ownership to its preexisting information including but not limited to computer programs, software, standard details, figures, templates and specifications. When transferring data in electronic media format, Consultant makes no representation as to long term compatibility, usability, or readability of documents resulting from the use of software application packages, operating systems, or computer hardware differing from those used by Consultant at the beginning of the Project. Because the data stored in electronic media format can deteriorate or be modified inadvertently or otherwise without authorization of the data's creator, when receiving electronic files, the City agrees that it will perform acceptance tests or procedures within sixty (60) calendar days after receipt of a respective file, after which the City shall be deemed to have accepted the data thus transferred. Any errors detected within the sixty (60) day acceptance period will be corrected by Consultant. Consultant shall not be responsible to maintain documents stored in electronic media format after acceptance by Owner. The original hard copy of the documents containing Consultant's professional engineer's seal shall take precedence over the electronic documents."

3.14 LAWS AND REGULATIONS:

- 3.14.1 The Consultant, its Sub-consultants, agents and employees, shall comply with all applicable Federal, State and County laws, the Charter, related laws and ordinances of the City of Miami Beach, and with all applicable rules and regulations promulgated by local, state and national boards, bureaus and agencies as they relate to this Project.
- 3.14.2 This Agreement shall be governed by, and construed in accordance with, the laws of the State of Florida, both substantive and remedial, without regard to principles of conflict of laws. The exclusive venue for any litigation arising out of this Agreement shall be Miami-Dade County, Florida, if in state court, and the U.S. District Court, Southern District of Florida, if in federal court. BY ENTERING INTO THIS AGREEMENT, CONSULTANT AND OWNER EXPRESSLY WAIVE ANY RIGHTS EITHER PARTY MAY HAVE TO A TRIAL BY JURY OF ANY CIVIL LITIGATION RELATED TO, OR ARISING OUT OF, THIS AGREEMENT.
- 3.15 WARRANTY: The Consultant warrants that the Services furnished to the Owner under this Agreement shall conform to the quality expected of and usually provided by the profession in the State of Florida applicable to these services.
- 3.16 OWNER REPRESENTATIVE: The Owner will assign a Project Manager to the Project to coordinate all Owner responsibilities under this Agreement. All instructions from the Owner to the Consultant, shall be issued by or through the Project Manager. The Consultant shall promptly inform the Project Manager in writing of any instructions received from others and of any other circumstances which arise that might affect the performance of the Services.
- designate in writing, within five (5) calendar days after receiving its initial Notice to Proceed, a qualified licensed professional to serve as the Consultant's project manager (herein after referred to as "CPM"). The CPM shall be authorized and responsible to act on behalf of Consultant with respect to directing, coordinating and administrating all aspects of Services to be provided and performed under this Agreement. The person selected by Consultant to serve as CPM shall be subject to prior written approval and acceptance by City. Replacement (including reassignment) of an approved CPM shall not be made without the prior written approval of the City.
- 3.18 CONSULTANT PERSONNEL: The Consultant shall identify in Exhibit C, attached hereto and made a part hereof, the specific technical or professional personnel to perform the necessary services under this Agreement. Such personnel shall not be replaced except when the City determines, in its discretion,

that the proposed replacement personnel has equal or greater qualifications or capabilities to perform the necessary services.

ARTICLE 4

CONSULTANT SERVICES

- 4.1 START OF WORK: No Services under this Agreement shall be performed by the Consultant prior to the issuance of a Standing Order and receipt of a Notice to Proceed, as set forth in subsection 3.7.1.
- **SCOPE OF SERVICES:** The Services are defined in the Scope of Services attached hereto and incorporated herein as Exhibit A.
- **4.3 SERVICES REQUIREMENTS:** In furnishing the Services to perform the tasks set out in Article 4.2 and Exhibit A, the Consultant shall:
 - 4.3.1 Maintain an adequate staff of qualified personnel on the work at all appropriate times to achieve its completion within the term specified in the Agreement.
 - 4.3.2 Cooperate to the fullest extent possible with the Department in the scheduling and coordination of all phases of the work.
 - 4.3.3 Report the status of the work to the Department upon reasonable request and hold pertinent data, calculations, field notes, records, sketches, and other products open to the reasonable inspection of the Department.
 - 4.3.4 Submit for Department review computations, sketches, and other data representative of the work's progress at the percentage stages of completion which may be stipulated in the applicable task, as referenced in Exhibit A. Submit for Department approval the final products upon incorporation of any modifications by the Department.
 - 4.3.5 Confer with the Department, as Project requires, as to interpretation of plans and other documents, correction of errors, omissions, and so forth. The Consultant shall not be compensated for the correction of errors and omissions caused by the Consultant.

ARTICLE 5

REIMBURSABLE EXPENSES

5.1 Reimbursable Expenses are in addition to the compensation for the Services contemplated in Article 4.2 and Exhibit A, and Additional Services and include

actual expenditures made by the Consultant in the interest of the Project. All Reimbursable Expenses pursuant to this Article, in excess of \$500, must be authorized in advance in writing by the Project Manager. Invoices or vouchers for Reimbursable Expenses shall be submitted by the Consultant to the Owner, along with supporting receipts, and other back-up material reasonably requested by the City, and Consultant shall certify as to each such invoice that the amounts and items claimed as reimbursable are "true and correct and in accordance with the Agreement".

- 5.2 Expenses subject to reimbursement in accordance with the above procedures may include the following:
 - 5.2.1 The cost of testing or investigation, if authorized by the Project Manager.
 - 5.2.2 Expense of reproduction, postage and handling of drawings, specifications and other documents, excluding reproductions for the office use of the Consultant and Sub-consultants. Courier and postage between the Consultant and its Sub-consultants are not reimbursable.
 - **5.2.3** Expenses for reproduction and the preparation of graphics for community workshops

ARTICLE 6

COMPENSATION FOR SERVICES

The City agrees to pay to the Consultant and the Consultant agrees to accept the amounts determined in accordance with this Article for all Services rendered to this Agreement.

- 6.1 PAYMENT FOR SERVICES: This is a Lump Sum Agreement. The Consultant agrees to perform the Services specifically described for the agreed total amount of \$653,900.00. This price shall be full compensation for all costs, including overhead and profit, associated with completion of the Services in full in conformity with the requirements stated herein.
 - 6.1.1 NON COMPENSABLE CHARGES: Consultant shall neither invoice Owner for charges for office, rent or overhead expenses of any kind, including but not limited to, insurance, local telephone and utility charges, office/drafting supplies, depreciation of equipment, professional dues, subscriptions, in-house reproduction of drawings and/or specifications, mailing, stenographic, nor shall it invoice for other employee time or travel and substance not directly related to the Project.

- 6.1.2 INVOICES AND METHODS OF PAYMENT: The Consultant shall submit monthly to the Project Manager, two (2) copies of a duly certified invoice for payments stating that the Services for which payment is requested have been performed per this Agreement. Invoices for Services shall be based on the percentage of the Project completed as supplemented by a monthly written status report. Additional format requirements, content and submittal date of the invoice shall be as specified by the Project Manager. Provided there are no problems with an invoice, as determined by the Project Manager within fifteen (15) business days of receipt of same, payment by the Owner shall be in accordance with the "Florida Prompt Payment Act," Part VII, Chapter 218, Florida Statutes. Invoices with problems will be immediately returned to the Consultant without payment.
- 6.1.3 PAYMENTS TO SUB-CONSULTANTS: All payments to Sub-consultant(s) employed hereunder shall be the sole responsibility of the Consultant unless otherwise provided for herein. The Consultant shall make all payments to such Sub-consultant(s) promptly following receipt by Consultant of corresponding payment from the Owner. Prior to any payments to Sub-consultant(s), the Consultant shall, if requested by the Project Manager, furnish to the Owner a copy of the agreement(s) providing for such payments.

6.2 PAYMENT FOR ADDITIONAL SERVICES:

- 6.2.1 Additional Services for this Project will only be performed by the Consultant following receipt of a written authorization by the Project Manager prior to commencement of same. Such authorization shall contain description of the Additional Services required; an hourly fee, as provided in Exhibit B with a "Not to Exceed" amount on additional Reimbursable Expenses (if any); the amended Project Budget (if applicable); and an amended completion date for the Project (if any). "Not to Exceed" shall mean the maximum cumulative hourly fees allowable, which the Consultant shall not exceed without specific written authorization from the Owner. The "Not to Exceed" amount is not a guaranteed maximum cost for the services requested by the Owner and all costs applied to such shall be verifiable through time sheet and reimbursable expense reviews.
- 6.2.2 The term "Additional Services" includes services involving the Consultant or any Sub-consultants whether previously retained for the Services or not or whether participating as members with Consultant or not, subject to the City's right to previously approve any change in consultants as set forth in this Agreement.
- **6.2.3** Additional Services may consist of the following:
- **6.2.3.1** Serving as an expert witness in connection with any public hearing, arbitration proceeding or legal proceeding unless such preparation has arisen from the failure of the Consultant to meet the Standard of Care set forth in Section 3.17.

- 6.2.3.2 Preparing documents for change orders, or supplemental work, initiated at the City's request and outside the Scope of the Services.
- 6.2.3.3 Providing such other professional services to the City relative to the Project which arises from subsequent circumstances and causes (excluding circumstances and causes resulting from error, inadvertence or omission of the Consultant) which do not currently exist or which are not contemplated by the parties at the time of execution of this Agreement.
- **6.2.3.4** Assistance in connection with bid protests, rebidding or renegotiating contracts for construction, materials, equipment or services, except as otherwise expressly provided for herein.
- 6.3 TOTAL AUTHORIZED AMOUNT FOR THIS AGREEMENT: The Total Authorized Amount for this Agreement, including Reimbursable Expenses, is \$653,900.00.

ARTICLE 7

MISCELLANEOUS PROVISIONS

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- 7.1 EQUAL EMPLOYMENT OPPORTUNITY GOALS: Consultant agrees that it will not discriminate against any employee or applicant for employment for work under this Agreement because of race, color, religion, sex, age, national origin, disability or sexual orientation and will take affirmative steps to ensure that applicants are employed and employees are treated during employment without regard to sexual orientation, race, color, religion, sex, age, national origin, or disability. This provision shall include, but not be limited to, the following: employment upgrading, demotion or transfer; recruitment advertising, layoff or compensation; and selection for training, including apprenticeships. Consultant agrees to furnish City with a copy of its Affirmative Action Policy.
- 7.2 PUBLIC ENTITIES CRIME ACT: In accordance with the Public Entity Crimes Act (Section 287.133, Florida Statutes), a person or affiliate who is a consultant, who has been placed on the convicted vendor list following a conviction for a public entity crime may not submit a bid on a contract to provide any goods or services to the City, may not submit a bid on a contract with the City for the construction or repair of a public building or public work, may not bids or leases of real property to the City, may not be awarded or perform work as a contractor, supplier, subcontractor, or sub-consultant under a contract with the City, and may not transact business with the City in excess of the threshold amount provided in Section 287.017, Florida Statutes, for Category Two for a period of 36 months from the date of being placed on the convicted vendor list. Violation of this Section by Consultant shall result in cancellation and may result in Consultant's debarment.

7.3 This document incorporates and includes all prior negotiations, correspondence, conversations, agreements or understandings applicable to the matters contained herein; and the parties agree that there are no commitments, agreements or understandings concerning the subject matter of this Agreement that are not contained in this document. Accordingly, the parties agree that no deviation from the terms hereof shall be predicated upon any prior representations or agreements whether oral or written. It is further agreed that no modification, amendment or alteration in the terms or conditions contained herein shall be effective unless contained in a written document executed with the same formality and of equal dignity herewith.

ARTICLE 8

NOTICE

8.1 All written notices given to Owner by Consultant shall be addressed to:

City Manager's Office c/o Assistant City Manager Robert Middaugh City of Miami Beach 1700 Convention Center Drive Miami Beach, Florida 33139

With a copy to:

Fred Beckmann, P.E., Department of Public Works Director City of Miami Beach 1700 Convention Center Drive Miami Beach, Florida 33139

All written notices given to the Consultant from the Owner shall be addressed to:

Victor J. Pujals, P.E., Vice-President Camp Dresser & McKeen, Inc. 800 Brickell Avenue Suite 710 Miami, Florida 33131

All notices mailed to either party shall be deemed to be sufficiently transmitted if sent by certified mail, return receipt requested.

8.2 ENTIRE AGREEMENT: This Agreement represents the entire and integrated Agreement between the Owner and the Consultant and supersedes all prior negotiations representations or agreements between the parties hereto, either

written or oral, pertaining to the Project. This Agreement shall not be amended except by written Amendment, signed by the Owner and the Consultant.

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IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by their appropriate officials, as of the date first entered above.

For City:	City of Miami Beach, Florida
Attest: By: My Parller City Clerk Robert Parcher	Mayor David Dermer
For Consultant:	Camp Dresser & McKee, Inc.
Attest:	
By: Corporate Socretary	Vice-President Vice-President

Print Name

APPROVED AS TO FORM & LANGUAGE & FOR EXECUTION

EXHIBIT A [INSERT SCOPE OF SERVICES]

EXHIBIT A

FURTHER DESCRIPTION OF CONSULTING AND RELATED MATTERS SCOPE OF WORK

PHASE I - WORK ORDER MANAGEMENT IMPLEMENATATION CITY OF MIAMI BEACH INFRASTRUCTURE MANAGEMENT SYSTEM (IMS)

Introduction

The City of Miami Beach (OWNER) Department of Public Works (DPW) is creating an Infrastructure Management System (IMS) that will be implemented in phases across multiple years. The IMS system will include infrastructure Geographic Information System (GIS), service request and work order management within a Computerized Maintenance Management System (CMMS). The OWNER has selected Camp Dresser & McKee Inc. (ENGINEER) to provide the services outlined herein using the OWNER's normal procurement process.

The Phase I IMS startup elements will be performed for the OWNER's DPW Operations Division. The Operations Division is further defined as the following six infrastructure systems (Water, Sanitary Sewer, Stormwater, Streets, Street Lighting and Sanitation). These six infrastructure systems, for the purpose of this scope of services, will be referred to as NETWORKS. The Phase I IMS elements for the NETWORKS include:

- Procurement of integrated software,
- Design refinements to five of the six Geographic Information System (GIS) database models for the Operations Division,
- Implementing the applications software for asset management, service request management, and work order management in an unattached mode city-wide (unattached mode refers to Work Orders issued based on addresses; attached mode refers to Work Orders issued based on individual assets)

The results of Phase I will be a fully functional CMMS working in an unattached mode for the entire City, and modified plans, procedures and designs to allow for the following Phase(s) to link the CMMS and GIS for the OWNER's entire NETWORKS service areas.

Any additional field data conversion, software purchases or miscellaneous related services shall be addressed as additional service authorizations from the OWNER.



Scope of Services

The following Phase I tasks outline the activities that will be performed to startup the CMMS for the OWNER. The Phase I tasks will help refine any additions to the scope of effort desired by the OWNER for the remaining NETWORKS GIS data conversion effort (Phase II).

Task 1 Project Kick-Off and Project Management

The ENGINEER shall conduct a project kick-off meeting with key OWNER staff representatives. The kick-off meeting will provide an overview of the scope of services, establishment of key NETWORKS contacts, discussion of available data the OWNER shall be providing to the ENGINEER and overview the involvement of the OWNER staff throughout the project.

The ENGINEER shall prepare and provide a project schedule to the OWNER in Microsoft Project format. The project schedule and budget will be used by the ENGINEER and the OWNER's project managers to track the progress of the project on a monthly basis. The ENGINEER's project manager shall meet monthly with the OWNER's project manager to provide a status report on the project progress. This shall include the status of the project schedule and budget.

The ENGINEER shall establish a project specific e-ROOM web-site to be used by the OWNER and the ENGINEER for the transfer of data and digital file storage of key project information, including digital copies of the problem resolution process.

This task also includes additional meetings for Owner staff information purposes, provided to the Owner prior to the formal Notice to Proceed.

Task 2 Data Model Refinement / Design

The OWNER has expressed a desire to use an existing data model for five of the six NETWORKS models (Water, Sanitary Sewer, Stormwater, Streets, and Street Lighting). The ENGINEER recommends that the data models be refined to streamline the models to meet the exact current and anticipated needs of the OWNER. This task describes the activities that will result in an OWNER-specific IMS geodatabase design for each of the five NETWORKS that will not carry unwanted, unused information or functionality within the model. It is assumed that sanitations does not have any fixed assets, therefore a data model is not required for this network.

Task 2-1 Database Design/Data Modeling Workshops

The ENGINEER will coordinate and lead a Database Design/Data Modeling one-half day workshop. OWNER staff from each of the five NETWORKS will be invited. The goal of the workshop will be an educational and/or informational component to familiarize OWNER staff attendees with the following topics:

- ArcGIS geometric network (edges, junctions, features, objects);
- Geodatabase design specifics (features, classes, sub-types, domains, relationships);



- Basics of ArcGIS extensions (how and why to create custom code);
- Connectivity Rule basics.

The goal of the next series of NETWORKS half-day workshops (one per five NETWORK in consecutive days) is to define an ArcGIS (ArcInfo) Version 8.x (or 9.x) geodatabase object model design that will support the NETWORKS requirements. During these NETWORKS workshops, the ENGINEER and OWNER staff will work together to define the best-fit object model design for the OWNER. If possible, ENGINEER will start with the use of an existing ArcGIS standard model for the NETWORKS being modeled. Throughout the workshops, the ENGINEER will work with OWNER staff to compare the specific features and attributes of the standard design models to the OWNER's existing business practices. The goal of each of the NETWORKS workshop is to customize the ArcGIS model to fit the existing needs of the OWNER, as well as to explore possible future needs. Topics covered during the NETWORKS workshops will include the following:

- Use of ID numbers on features;
- Linking the Geodatabase to asset management/work management system;
- Linking the Geodatabase to hydraulic modeling software (if needed);
- Modeling facilities in detail vs. as simple junctions;
- Use of sub typing;
- Use of object relationships;
- Utilizing custom applications and class extensions;
- Various related topics, as time permits.

At the completion of the Database Design/Data Modeling Workshops, the ENGINEER will have the information necessary to produce a draft of the data model. The OWNER staff who attended the workshops should have a better understanding of the various concepts and processes that were presented.

Task 2-2 Develop Database Design/Data models

The ENGINEER will use the information from the Database Design/Data Modeling Workshop to develop a draft database design/data model for each of the five NETWORKS. The draft will include the required fields to integrate with the computerized maintenance management system (CMMS), e.g. Cityworks, the hydraulic models, and other key information systems identified during the workshop that are both practical and beneficial to the overall IMS.

Task 2-3 Submit Draft Database Design/Data Model

ENGINEER will deliver five draft copies of each of the NETWORKS draft geodatabase design data models to the OWNER's Project Manager for review and comments. The OWNER will review the drafts and develop questions, comments, and suggestions within ten business days.



Task 2-4 Draft Database Design/Data Model Review Session

The ENGINEER will coordinate and lead a Draft Database Design/Data Model Review Session. OWNER staff representing the NETWORKS will be invited to attend. The goal of this session is to solicit the OWNER's comments, discuss them, and develop a set of modifications to the Draft Database Design/Data Model that, after implemented, will result in the Final Draft Database Design/Data Model.

Task 2-5 Modify Draft Database Design/Data Model

The ENGINEER will use the results of the Draft Database Design/Data Model Review Session to further enhance each of the NETWORKS database models. One final draft version of the models will be produced and delivered to the OWNER's Project Manager within ten business days of receipt.

Task 2-6 Final Review of Draft Database Design/Data Model

The ENGINEER will facilitate a meeting of OWNER staff that includes at least one supervisor for each of the NETWORKS. The goal of the meeting will be to review the changes to the model and develop any final recommendations and obtain OWNER approval of the database models prior to the implementation of the Cityworks CMMS software.

Task 2-7 Finalize Database Design/Data Model

Based on comments from the OWNER's final review session, the ENGINEER will make any further changes that have been approved by the OWNER and finalize the Database Design/Data Model. This version of the model will be considered "final". The ENGINEER will then produce the NETWORKS geodatabases in preparation of the data conversion and software implementation tasks. The NETWORKS geodatabases will be used by the ENGINEER and delivered with the functionality of the CMMS implementations.

Task 3 Provide Software

The ENGINEER will provide licensed software to the OWNER directly of Azteca Cityworks and ESRI GIS software for the Phase I activities. The software will be loaded on adequate hardware supplied by the OWNER.

Task 3-1 Cityworks Software Procurement

The ENGINEER will provide twelve (12) complete licensed seats of the Cityworks software (requires ESRI software), 2 seats of Cityworks Storeroom software (does not require ESRI software) and 2 seats of Cityworks Call-Center software (does not require ESRI software) with documentation to the OWNER. The software will be licensed directly to the OWNER.

At the desktop, Cityworks will be implemented in a client/server environment. The ENGINEER will provide seven (7) ESRI ArcView 8.3 seats and one (1) license of ESRI ArcSDE for SQL Server for 1 server and up to 2 CPUs to house the geo-object relational models. The ENGINEER will provide the ESRI ArcSDE software initially



with 20 cals. The ENGINEER requests that the OWNER provide a secure access (dialup or VPN) for the ENGINEER into the OWNER's computer network, so that tasks related to this implementation and on-going support, such as software installation, software/database configuration, general troubleshooting can be performed remotely.

The OWNER will provide one workstation computer for each Cityworks licensed software seat (total of ten workstations). Each workstation should be connected directly or through the OWNER's network connection to an OWNER supplied laser printer. The OWNER will provide one database computer server with Microsoft SQL Server Enterprise edition with a minimum of 40 cals to house the databases and the ArcSDE software.

Task 3-2 Initial Load Software

The ENGINEER will load the Cityworks, ESRI ArcView, Microsoft SQL Server Enterprise, and ArcSDE software products on the OWNER provided hardware. The installation and coordination work designated to be performed for the following software:

- 1. Installation of 12 seats of Cityworks Desktop,
- 2. Installation of 2 seats of Cityworks Storeroom,
- 3. Installation of 2 seats of Cityworks call-center,
- 4. Installation of 7 seats of ESRI ArcView,
- 5. Installation of Microsoft SQL Server with test and production database instances,
- 6. Installation of ESRI ArcSDE for operations of the test and production databases.

Task 4 Plan and Configure Software

The ENGINEER will plan and configure the AZECTA Cityworks software products using a two step approach followed by a step three for Final Installation and Training. The two steps are:

- Step 1: Implementation Planning
- Step 2: Configuration

The intent is to setup and configure the IMS software to work in an intelligent manner using unattached mode, yet be easily used in attached mode with the assets once the GIS data conversion effort is completed for each Network.

Task 4-1 Step 1: Implementation Planning

Step 1 will confirm/plan the requirements for the IMS applications. Some of this task will done concurrent with our previously described task for installation of software and databases. While the baseline database installation could allow the OWNER to start using Cityworks in unattached mode after the initial installation of the software it would basically be operating in a non-intelligent method and not allow the full functionality of Cityworks to be realized (It would basically be a Work Request Tracker not a Work Order Management System). Although we do not highly recommend this type of use, this can be done to assist OWNER staff performing work



orders if no other work order system is in place. Each work order that would performed under this limited process would require a significant amount of OWNER staff work to attached a completed work order to an asset at a later date. To establish a valid full implementation of the Cityworks product the planning for the configuration will occur in Step 1 using the following tasks.

Task 4-1.1: Initiate the Project and Data Gathering

The goals for this task are to initiate the implementation with a meeting that will be an interactive workshop to identify project goals, inform the participants about pertinent implementation topics, clarify project roles, and gather information for the next tasks. In addition, specific information relating to the existing hardware, software, and infrastructure network design of the OWNER will be assessed. The ENGINEER shall provide a listing of requirements prior to the meeting. The OWNER will be responsible to provide the ENGINEER elements related the following items:

- List of Assets
- Work Activity Types
- Work Tasks
- Customer Problem Types
- Security for Work Orders and Customer Problem Types
- Employee listings (work teams, Work Groups, Pay Rates, etc.)
- Material
- Equipment
- Customer Accounts

The ENGINEER will prepare a memorandum summarizing the meeting and provide other notes throughout this phase. These meeting notes will serve to define the requirements for the configuration of each Network of the project.

Task 4-1.1.1: On-site Cityworks Orientation

The ENGINEER will review Cityworks user requirements for the Asset Management System with the OWNER's project staff at the OWNER's facilities during an interactive workshop. The focus of the workshop will be a review of any current work management applications, assisting anticipated users of the applications to begin to learn the available functionality, and helping the Public Works Department staff to understand how the individual Cityworks and GIS components can work together to achieve the desired results.

Task 4-1.1.2: Cityworks Database Installation

The ENGINEER will provide written documentation and train OWNER staff (e.g. GIS Administrator(s)) to install the basic Cityworks database on the OWNER's hardware and test the system. Although the Cityworks system is flexible to the database design and content of the existing ESRI geodatabase, slight modifications to the geodatabase may be necessary. Cityworks requires the presence of four fields on each feature and object class on which work will be performed. The ENGINEER will train the OWNER's staff how to perform this specific function.



Task 4-1.2: Prepare Maintenance Solution for the OWNER

The following tasks will be performed to document the maintenance processes within the OWNER's organization. The OWNER will provide the ENGINEER with a representative for each of the NETWORKS who has a thorough understanding of these maintenance processes. It would be desirable that these staff also served as the main NETWORKS point of contacts for the ENGINEER throughout the course of this implementation.

Task 4-1.2.1: Identify and Document Maintenance Processes

Based on the findings from Task 4-1.1, the ENGINEER will provide an additional questionnaire for clarification to the OWNER's Project Manager, who will be responsible for distributing it to the NETWORKS representatives and collecting responses within 15 business days. The NETWORKS representatives will copy and distribute the questionnaire as needed within the NETWORKS users group and will later gather and submit the results to the ENGINEER. The ENGINEER will combine the results onto one copy of the questionnaire for each of the NETWORKS and return the results to the OWNER's Project Manager for review, changes and final approval.

The ENGINEER anticipates that the OWNER has in place both a request (reactive) and work order (preventive) driven process. From this questionnaire, the ENGINEER intends to identify the following:

- Work order or service request types
- Whether the work order or service request is preventive or reactive
- Work tasks for each work order type
- Employees and labor classifications in NETWORKS group
- Inventory (material) types
- Major equipment types
- Existing datasets (GIS and otherwise) used or slated to be used in the work order or service request process (OWNER will supply at a minimum a complete road centerline GIS shapefile that contains the street name and address range for each street segment)
- Samples of work order and service request printout forms

After reviewing the results of the questionnaires, the ENGINEER may conduct a series of meetings with representatives for each of the NETWORKS to refine the information to be input into the CMMS. These meetings will confirm the results of the Maintenance Process Questionnaires.

Task 4-1.2.2: Conduct a Maintenance Process Workshop to Identify and Validate Maintenance Processes

The ENGINEER will conduct a two to four hour long workshop for each of the NETWORKS with designated OWNER NETWORKS participants. The purpose of these workshops is to confirm the information gained through the Maintenance Process Questionnaire and understand the work and data flow in and out of the proposed system. Using that information, the ENGINEER and the OWNER's NETWORKS participants will identify the following:



- The hierarchy of work orders/service requests and their tasks
- The default time period for such tasks
- The default material, equipment and labor to be used
- The GIS activities that are used for this process

Task 4-2 Step 2: Configuration

After the successful planning of each Network, the ENGINEER will configure and test the initial Cityworks database and applications at the OWNER's facilities. The purpose of the initial Cityworks configuration is to test, prior to operational rollout, the applications and to confirm that the applications meet the requirements defined under Step 1.

The ENGINEER will configure the applications for baseline operational deployment. It is anticipated that much of the configuration activity performed will occur off-site. However, significant amounts of the configuration activity may occur on-site as well. For off-site activities, the ENGINEER requests secure outside access (telephone line dial-up or VPN) to the OWNER's system, so that tasks related to this implementation and on-going support, such as software installation, software/database configuration, and general troubleshooting can be performed remotely.

Task 4-2.1: Perform Cityworks Database Configurations and Onsite Review
The ENGINEER will configure (transferring knowledge of this process to the
OWNER's staff) the Cityworks databases and applications (GIS and Work
Management) on a server/computers supplied by the OWNER. In addition, specific
modifications will be made by the ENGINEER to the existing geo-object and work
management database tables. This is more specifically defined below:

Task 4-2.1.1: Configure Cityworks Database

Using the information gained from Step 1, the ENGINEER will implement modifications to the Cityworks CMMS database. The ENGINEER will work in cooperation with OWNER staff (knowledge transfer) to prepare this information for use within the Cityworks environment.

The Work Order and Service Requests printout forms will be configured as agreed to by the ENGINEER and the OWNER during Step 1, as provided by standard Cityworks configuration options.

Task 4-2.1.2: Onsite Review

Once the above databases have been installed and are operational, the ENGINEER will participate in a two to four hour long, on-site workshops for each of the NETWORKS to review the configuration. In an effort to minimize costs, the ENGINEER's goal is to provide the OWNER with the Cityworks database configured to the specifications derived from the questionnaire and the Step 1 planning effort. If other configuration issues exist, the ENGINEER can assist in addressing them during the individual workshops. The software as configured will allow for detailed work orders to be performed in unattached mode that is them easily attached to an asset in the GIS when the GIS is built.



Task 4-3 Step 3: Final Installation and Training

This step is to provide OWNER's staff with Cityworks and ESRI training. The ENGINEER will provide training and related training documents and data that will be required.

Task 4-3.1: Test Environment Installation

The ENGINEER will install ESRI and Cityworks software on one of the City's training room computes. The OWNER will help the ENGINEER install Cityworks and ESRI software on the remaining computers in the OWNER's training facility. The ENGINEER will test the computers in the training facility one day prior to training.

Task 4-3.2: ESRI Training

The ENGINEER will provide the following ESRI software training to OWNER staff:

- Quantity of 2 training sessions for Introduction to ArcGIS for ArcView and ArcInfo I 2 day class at OWNER site OWNER to supply training facility and equipment, up to ten students per each class,
- Quantity of 2 training sessions for Introduction to ArcGIS for ArcView and ArcInfo
 II 3 day class at OWNER site OWNER to supply training facility and equipment,
 up to ten students per each class,
- ArcSDE Administration for SQL Server 5 day class at ESRI site one OWNER student, and
- Building Geodatabases I 3 day class at ESRI site one OWNER student.

The ENGINEER will supply training materials for each student.

Task 4-3.3: Cityworks Training

The ENGINEER will provide two staff members for five consecutive business days of training to the OWNER's staff on the use of the unattached mode Cityworks software. The training will be conducted using ten OWNER supplied workstations configured with the OWNER's datasets. The ENGINEER will conduct the training. The ENGINEER will develop and provide training workshops that will accommodate up to ten users each. The following sessions will be provided:

- Day 1: GIS Interaction within Cityworks Service Request Generation and Processing
- Day 2: Service Request Generation and Processing Continued Work Order Generation and Processing
- Day 3: Work Order Generation and Processing Continued Inspections/Tests
- Day 4: Cityworks Administration
- Day 5: Practice Scenarios

The ENGINEER will train the OWNER staff in using Cityworks. The ENGINEER will provide on-site training and curriculum for the software modules and products supplied to the OWNER. The ENGINEER will supply training materials for each student.



Cityworks training is modular. Students need only to attend those sections that are relevant to the type of work that they are performing. The courses include relevant materials and sample data. Training is held in a classroom environment that will meet the following specifications:

- The OWNER will provide all computers used for training.
- The OWNER will provide the location and set-up (physical space) for training.
- The training area will be large enough to accommodate ten networked computers, ten students and an instructor with a table, computer, projector, and supporting materials. Prior to the training, the computers will be configured by ENGINEER with ArcGIS for ArcView, Cityworks software, and Relational Database Management System (RDBMS) software if necessary. The OWNER will supply and configure the computers with MS-Office 2000 or MS Office 2003. Computers must meet the minimum level requirements of Pentium processor, high-resolution 15"-inch monitor, with floppy and CD drives and either Windows 2000 Professional (preferred, but not required) or Windows XP. Processor @ 600 MHz, 256 MB RAM, 10 GB disk, 100 MB NIC.
- The training area will have available to the instructor a high-resolution projector that supports 1024x768 and a projection screen.

The OWNER will identify candidates for training based upon the following criteria:

- Each student currently participates in the Work Order or Service Request process.
- Students who participate in training will have advance basic personal computer (PC) literacy and ENGINEER supplied ArcGIS for ArcView training or related GIS experience.

Based on this process being replicated for each network the actual training would target the following quantities of OWNER staff. The street lighting and the sanitation networks will train at the same time.

The following sessions will be provided:

 Day 1: GIS Interaction within Cityworks Service Request Generation and Processing

Water Network - 10-15 trainees (GIS staff, Call-Center Staff, Maintenance Staff, DPW management)

Sewer Network - 10-15 trainees (GIS staff, Call-Center Staff, Maintenance Staff, DPW management)

Stormwater Network – 10-15 trainees (GIS staff, Call-Center Staff, Maintenance Staff, DPW management)

Street (Pavement) Network – 10-15 trainees (GIS staff, Call-Center Staff, Maintenance Staff, DPW management)

Street Light/Sanitation Network - 10-15 trainees (GIS staff, Call-Center Staff, Maintenance Staff, DPW management)



■ Day 2: Service Request Generation and Processing Continued Work Order Generation and Processing

Water Network - 10 trainees (GIS staff, Maintenance Staff, DPW management) Sewer Network - 10 trainees (GIS staff, Maintenance Staff, DPW management)

Stormwater Network – 10 trainees (GIS staff, Maintenance Staff, DPW management)

Street (Pavement) Network - 10 trainees (GIS staff, Maintenance Staff, DPW management)

Street Light/Sanitation Network - 10 trainees (GIS staff, Maintenance Staff, DPW management)

■ Day 3: Work Order Generation and Processing Continued Inspections/Tests

Water Network - 10 trainees (GIS staff, Maintenance Staff, DPW management) Sewer Network - 10 trainees (GIS staff, Maintenance Staff, DPW management)

Stormwater Network - 10 trainees (GIS staff, Maintenance Staff, DPW management)

Street (Pavement) Network - 10 trainees (GIS staff, Maintenance Staff, DPW management)

Street Light/Sanitation Network - 10 trainees (GIS staff, Maintenance Staff, DPW management)

■ Day 4: Practice Scenarios

Water Network – 10-15 trainees (GIS staff, Call-Center Staff, Maintenance Staff, DPW management)

Sewer Network - 10-15 trainees (GIS staff, Call-Center Staff, Maintenance Staff, DPW management)

Stormwater Network - 10-15 trainees (GIS staff, Call-Center Staff, Maintenance Staff, DPW management)

Street (Pavement) Network - 10-15 trainees (GIS staff, Call-Center Staff, Maintenance Staff, DPW management)

Street Light/Sanitation Network – 10-15 trainees (GIS staff, Call-Center Staff, Maintenance Staff, DPW management)

■ Day 5: Cityworks Administration

One Time All Networks - 3-6 trainees (1 to 2 -GIS staff, 1 to 2-IT DBA, 1 to 2 DPW Management Designated IMS coordinators)

Each network – 1-2 hours per network for Network specific elements. 3-6 trainees (1 to 2 -GIS staff, 1 to 2-IT DBA, 1 to 2 DPW Management Designated IMS coordinators)



DATA OR ASSISTANCE TO BE PROVIDED BY OWNER

- A. Assign a Project Manager to represent the OWNER on this assignment and assign a representative for each of the NETWORKS as the point of contact for the NETWORKS
- B. Assist in the scheduling of necessary meetings and workshops during the execution of the work by the ENGINEER
- C. Providing all hardware and software in a timely manner to be used by the OWNERS staff during the project execution as detailed herein. This includes the following:
 - Ten computer workstations with printers (one per Cityworks licensed software), and with MS-Office 2000
 - Two computer systems with printers for the Cityworks Storeroom software,
 - Two computers with printers for the Cityworks Call-Center software, and
 - Database computer server with Microsoft SQL Server Enterprise edition with a minimum of 40 cals.
- D. Copy of OWNER's organization chart by Departments and a copy of the Public Works Department/Division organization chart
- E. Provide secure outside access (telephone line dial-up or VPN) to the ENGINEER for the OWNER's computer network system
- F. Provide training area and facilities including workstations that meet the requirements of Task 4-3.3

DELIVERABLES

- A. Draft data models for water, sanitary sewer, stormwater, streets, and street lighting systems
- B. Final data models for water, sanitary sewer, stormwater, streets, and street lighting systems
- C. Project schedule
- D. Twelve complete licenses of Cityworks software
- E. Two licensed seats of the Cityworks Storeroom (parts inventory) software
- F. Two licensed seats of the Cityworks Call-Center software
- G. Seven concurrent use licensed seats of ESRI ArcView 8.3 software

